APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,109	10/10/2000	Siamak Nazari	SUN-P4432-ARG	4424

			EXAMINER
22835	7590	04/05/2004	TRAN, LAMBERT L

PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

ART UNIT	PAPER NUMBER
2144	6

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/686,109	NAZARI, SIAMAK
	Examin r	**Art Unit**
	Lambert L. Tran	2144

-- The MAILING DATE of this communication appears on th cover sh et with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 January 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-12,14-19 and 21* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 7-12, 14-19, and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Amendment A, received on 09 January 2004, has been entered as Paper No. 5.

2.   Claims 1, 8, 15 are amended. Claims 6, 13, 20 and 22 are canceled.

3.   Claims 1-5, 7-12, 14-19 and 21 are pending.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 4, 5, 7, 8, 11, 12, 14, 15, 18, 19, 21 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Muller et al., U.S. Patent No 6,256,740, hereinafter referred to as

Muller, in view of Jagannathan et al., U.S. Patent No 5,692,193, hereinafter referred to as

Jagannathan.

6.   In regard to claims 1, 8, 15, Muller disclosed:

detecting the presence of the device within a local computer system that is part of the distributed

computing system [see Muller, ABSTARCT, col. 6, lines 11-17]; and

if an identifier has not been assigned to the device, assigning an identifier to the device [see

Muller, col. 6, lines 40-47]. Muller disclosed a method and system of assigning device ID to a

local device (compute node) using globally unique ID [see Muller, Figure 2, col. 3, lines 24-34].

Muller disclosed the scope of the unique ID (globally unique) and the assignment, usage and

storage of this ID (local). However, Muller did not expressly disclose all the possible

implementation or possible implementing mechanisms pertaining to the allocation of the unique

identifiers.

In the same field of network architecture, virtual processors, and assignment of identifiers

(thread ID) [see Jagannathan, ABSTRACT], Jagannathan disclosed a mechanism to assign

identifiers for a local pool using global pool: *if the local pool* (V's pool of thread control block

TCB) *is empty, retrieving at least one additional identifier for the local pool from a global*

allocator for device identifiers located within the distributed computing system, retrieving a

block of identifiers for the local pool from the global allocator (global pool allocates a block of

thread Ids for a local thread control block TCB);

 and assigning the retrieved identifier to the device so that the identifier can be used to reference

the device (threads are mapped to processors) [see Jagannathan, col. 14, lines 36-39, col. 5, lines

63-64, and Figure 5]. An ordinary artisan in the art at the same time the invention was made,

would have been motivated to look to a way to improve the centralization of naming service,

which generates and assigns name to all devices, since device entities computing over a high

performance connectivity fabric act as architectural peers [see Muller, col. 3, lines 11-13, and

lines 5-7].

7.   Accordingly, it would have been obvious to one of ordinary skill in the network

programming art at the time the invention was made to have incorporated Muller teachings of

assigning global unique ID with the teachings of Jagannathan of utilizing global and local pool

ID's, for the purpose of better managing and synchronizing the activities of a collection of

processes [see Jagannathan, col. 1, lines 48-49].

8.   For the rationale set forth above, claims 1, 8, 15 are rejected.

9.   In regard to claims 4, 5, 11, 12, 18, 19, Jagannathan disclosed a Thread Policy Manager

and Thread Controller that manage the generation of unique (thread, TCB) ID, wherein:

communicating the provisional identifier to the global allocator; if the global allocator approves

the provisional identifier, recording the provisional identifier as a permanent device identifier;

and

if the global allocator rejects the provisional identifier, assigning a new identifier from the

global allocator to the device.

retrieving at least one additional identifier from the global allocator involves retrieving a block

of identifiers for the local pool from the global allocator [see Jagannathan, col. 15, lines 53-67,

col. 16, lines 1-67, col. 17, lines 1-50].

10.   In regard to claims 7, 14, 21, Muller disclosed: *device can include:*

a disk drive; a tape drive; an I/O device; and a networking device [see Muller, col. 4, lines 37-

49].

11.   Claims 2, 3, 9, 10, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Muller (U.S. Patent No 6,256,740), in view of Jagannathan (U.S. Patent No 5,692,193), in

further view of Taylor, Dave, "Teach Yourself UNIX In A Week", Copyright 1994 by Sams

Publishing, hereinafter referred to as Taylor.

12.   In regard to claim 2, 9, 16, the combination of Muller and Jagannathan disclosed the

inventions substantially as claimed. However, Muller and Jagannathan did not disclose:

wherein the identifier includes a device major number that specifies a device driver to be used to

access the device, and a device minor number that identifies the device to be accessed by the

device driver, wherein the device minor number includes an instance number that uniquely

identifies an instance of the device, and a unit number that identifies all independently

addressable sub-unit within the device. In the UNIX textbook cited above, Taylor taught:

wherein the identifier includes a device major number that specifies a device driver to be used to

access the device, and a device minor number that identifies the device to be accessed by the

device driver, wherein the device minor number includes an instance number that uniquely

identifies an instance of the device, and a unit number that identifies all independently

addressable sub-unit within the device [see Taylor, "Teach Yourself UNIX In A Week", p. 175].

An ordinary artisan in the art at the same time the invention was made, would have been

motivated to look to a way to apply the global unique device ID to an UNIX system, since UNIX

systems have been widely used and very popular in network computing.

13.   Accordingly, it would have been obvious to one of ordinary skill in the network

computing art at the time the invention was made to have incorporated teachings of Muller and

Jagannathan in generating global unique device ID for the UNIX devices from Taylor teachings

for the purpose of providing an UNIX network computing system that is better managing and

synchronizing the activities of all network devices.

14.   For the rationale set forth above, claims 2, 9, 16 are rejected.

15.   In regard to claims 3, 10, 17, Taylor and Muller disclosed:

the instance number is combined with the device major number and the unit number to produce

the identifier [see Taylor, "Teach Yourself UNIX In A Week", p. 175, see Muller, col. 10, lines

1-21].

16.   Since all the claims limitations are taught by the combination teachings of Muller,

Jagannathan and Taylor, claims 1-5, 7-12, 14-19, and 21 are rejected.

Response to Arguments

17.   Applicant's arguments, see Amendment A, filed on 09 January 2004 (Paper No. 5), Page

8, regarding Lichtman (U.S. 5,819,107), with respect to claims 1, 4, 5, 7, 8, 11, 12, 14, 15, 18,

19, 21, 7, 14, and 2, 9, 16 have been fully considered and are persuasive. The rejection of said

claims, with reference to Lichtman, has been withdrawn.

18.   Applicant's arguments filed in the same Amendment (Paper No.5) regarding Muller and

Jagannathan on Page 8 and 9 have been fully considered but they are not persuasive.

19.   Applicant argues that Jagannathan thread control blocks (TCB) do not have to be globally

unique. It is noted that the globally uniqueness was taught by Muller [see Muller, ABSTRACT].

Jagannathan taught the implementation and mechanism of assigning, retrieving identifiers in a

local pool of identifiers (TCB) from a global pool of identifiers [see Jagannathan, col. 14, lines

36-39 and Figure 5].

20.   Applicant further argues that: *"generating a globally unique ID at a local node from a*

globally unique node identifier is not the same as retrieving globally unique identifiers from a

global allocator." It is noted that Muller taught assigning global unique ID for device identifier

at a local device. While Muller did not expressly disclose global allocator and local pool,

Jagannathan did [see Jagannathan Figure 5]. While Muller did not expressly disclose global

allocator and local pool, Muller suggested the implementation of a storage area (local pool) for

the identifiers in Column 3, lines 31-33: "A local entry point is generated in the compute node

for the data associated with the globally unique ID," Muller teachings and suggestion in

combination with Jagannathan teachings of assigning identifiers for a local pool from a global

pool (global allocator) would meet all the claim limitations in Application invention.

Conclusion

21.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

22.   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

23.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lambert L. Tran whose telephone number is (703) 305-4663.

The examiner can normally be reached on M-F at 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jack B Harvey can be reached on (703) 305-9705. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

24.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.L.T
Assistant Examiner
GAU 2144
05 April 2004

JACK B. HARVEY
SUPERVISORY PATENT EXAMINER